



# भारत का राजपत्र

## The Gazette of India

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PUBLISHED BY AUTHORITY

सं० ४९] नई विल्ली, शनिवार, दिसम्बर ६, १९८६ (अग्रहायण १५, १९०८)

No. 49] NEW DELHI, SATURDAY, DECEMBER 6, 1986 (AGRAHAYANA 15, 1908)

(इस भाग में भिन्न पृष्ठ संख्या दो जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके)  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

### भाग III—खण्ड २

#### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी को गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचना और नोटिस  
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Calcutta, the 6th December 1986

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## CORRIGENDA

(1)

In the Gazette of India, Part III, Section 2 dated the 18th October 1986 under the heading "PATENTS SEALED" delete 156086.

(2)

In the Gazette of India, Part III, Section 2 dated the 18th October, 1986 under the heading "PATENTS SEALED", delete 156116.

## APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 214, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-700017

The dates shown in crescent brackets are the dates claimed under Section 135, of the Act.

30th October, 1986

792/Cal/86. American Cyanamid Company. Method of manufacturing a bonded particulate article by reacting a polyol and a hetero-cyclic compound.

793/Cal/86. American Cyanamid Company and Krause Milling Company. Method of manufacturing a bonded particulate article by reacting a polyol and a hetero-cyclic compound.

794/Cal/86. Neue Hamburger Stahlwerke GMBH. A process for cooling oxygen injection nozzles in the oxygen treatment of pig iron or steel.

31st October, 1986

795/Cal/86. O & K Orenstein & Koppel Aktiengesellschaft. An arrangement for fastening the base plate of a bucket to a belt by means of special screws.

796/Cal/86. Siemens Aktiengesellschaft. A multipole low-voltage circuit-breaker.

3rd November, 1986

797/Cal/86. Apace Research Limited. Emulsions of liquid hydrocarbons with water and/or alcohols and method of producing the same. (12th March, 1982) Australia; (30th November, 1982) Australia. [Divisional date 9th March, 1983].

798/Cal/86. E. I. Du Pont De Nemours and Company. Cryogenic brine separation of water and isocyanates.

799/Cal/86. Sico Incorporated. Extensible table.

800/Cal/86. Shin-Etsu Chemical Co. Ltd. A composite body for sustainedly releasing vapour of a vaporizable active substance and a method for the preparation thereof. [Divisional date 23rd July, 1984].

4th November, 1986

801/Cal/86. PHB Weserhutte Aktiengesellschaft. The dump back-loading appliance device gear.

802/Cal/86. Giulini Chemie GMBH. The method to produce three dimensional bracing elements from fusible synthetic powder or from the mixture of powders containing fusible synthetic powder and filling of these elements to substrate, in particular shoe parts.

5th November, 1986

803/Cal/86. Combustion Engineering, INC. Articles embodying a wear resistant surface layer and a method of manufacture thereof.

804/Cal/86. Westinghouse Electric Corporation. Improvements in or relating to current shunt for high impedance inputs.

805/Cal/86. Galbraith Engineering Pty. Ltd. Reciprocating machines.

## APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, 11TH FLOOR, KAROL BAGH, NEW DELHI-110005

13th October, 1986

900/Del/86. Gurdeep Singh Johar, "A process for the preparation of a pharmaceutical composition for the treatment of aone vulgaris (pimples)".

901/Del/86. Orbital Engine Company Proprietary Ltd., "Improvements relating to metering of fuel". (Convention date 11th October and 11th November, 1985) (Australia).

902/Del/86. Alejandro Stain, "Building structure". [Divisional date 30th January, 1984].

903/Del/86. The Lubrizol Corporation, "Water in oil emulsions".

904/Del/86. Interand Corporation, "System for sensing spatial coordinates". [Divisional date 20th February, 1984].

905/Del/86. Royal Ordnance PLC., "Linear cutting charge".

14th October, 1986

906/Del/86. Council of Scientific and Industrial Research, "A process for the preparation of polyester film containing immobilised protein".

907/Del/86. Poclain Hydraulics, "A motor or pump mechanism having at least two distinct active cylinder capacities".

908/Del/86. Craig Parkinson, "Liquid level monitoring assemblies". (Convention date 31st October, 1985) (Australia).

909/Del/86. Samsonite Corporation, Luggage case.

910/Del/86. The Lubrizol Corporation, Methylene linked aromatic pour point depressant.

911/Del/86. Fesco Corporation, Dump Block for dragline bucket.

15th October, 1986

912/Del/86. UOP INC., Catalytic composite for conversion of hydrocarbons.

913/Del/86. Albert Rolland S.A., A process for producing novel heterocyclic compounds. [Divisional date 15th February, 1984].

914/Del/86. Lajos Szekely, Quick action valve.

915/Del/86. Eastman Kodak Company, Apparatus for cutting continuous strand.

16th October, 1986

916/Del/86. Bal Krishan Gupta, Composit cylinder valve tester for I. P Gas cylinder valve.

917/Del/86. Albert Rolland S.A. A process for producing novel heterocyclic compounds. [Divisional date 15th February, 1984].

918/Del/86. Albert Rolland S.A. A process for producing novel heterocyclic compounds. [Divisional date 15-2-1984].

919/Del/86. Italcable Servizi Cablografici Radiotelegrafici E Radioelettrici S.p.A. Telephone system traffic analysis apparatus. (Convention date 8-1-1986) (U.K.).

17th October, 1986

920/Del/86. The B. F. Goodrich Co. Stabilization of iron in aqueous system.

921/Del/86. Council of Scientific and Industrial Research. An improved method for the manufacture of high sensitively thermistor.

20th October, 1986

922/Del/86. The Standard Oil Co. An oxydehydrogenation process. [Divisional date 3rd February, 1982].

923/Del/86. Shell Internationale Research Maatschappij B.V. Novel catalyst compositions and process for copolymerizing ethene and carbon monoxide.

924/Del/86. The British Petroleum Co. PLC. A method of powder forging gallium coated aluminium or aluminium alloy powder. (Convention date 15th March, 1983) (U.K.) & [Divisional date 27th February, 1984].

21st October, 1986

925/Del/86. Sulzer Brother Ltd. A fluid weaving loom. (Convention date 16th June, 1983) (U.K.) & [Divisional date 13th June, 1984].

926/Del/86. Sulzer Brother Ltd. A selvedge forming device for a weaving loom. (Convention date 16th June, 1983) (U.K.) & [Divisional date 13th June, 1984].

927/Del/86. Societe Nationale Industrielle Aerospatiale. A method of forming a composite material tube connection and a connection device comprising application thereof.

928/Del/86. The Lubrizol Corporation. Improved fuel compositions.

929/Del/86. The Lubrizol Corporation. A cetane improver.

22nd October, 1986

930/Del/86. Hans Raj Taneja. Direct printing method on aluminium metal plate or zinc metal plate (Other than the photolithography or xerox photo method).

931/Del/86. Durable Electricals Pvt. Ltd. An appliance for making of pop corn.

932/Del/86. Food Technicians. A process for the preparation of a liquid kitchen masala.

933/Del/86. Gerald K. Yankoff. Tool holder.

APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH, AT TODI ESTATES, 3RD FLOOR,  
SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

6-10-1986

277/BOM/86 . . . . . Seikosha Co. Ltd.

278/BOM/86 . . . . . Do

Pin belt type paper tractor

Paper detector of printer

7-10-1986 \*

279/BOM/86 . . . . . Santo Hashmatsing Ajwani

A new concept in ocean power generation.

280/BOM/86 . . . . . E. N. Contractor

Valves and taps used for liquids having improved efficiency.

9-10-1986

281/BOM/86 . . . . . H. K. Mhatre &amp; K. H. Mhatre

An improved locking means for a gas pressure regulator or for a high pressure gas connector to deliver unreduced pressure to use on a self-closing valve of a liquefied petroleum gas cylinder and the like.

282/BOM/86 . . . . . D. V. Hukerikar

Improved short pistons.

10-10-1986

283/BOM/86 . . . . . S. C. Kapoor &amp; S. A. Kapoor

Improved key operated ignition switch.

284/BOM/86 . . . . . A. V. Mcendale, A. M. Shanbhag &amp; S.R. Avate

Improvement in performance of four stroke reciprocating piston type internal combustion engines by providing inertial valve.

285/BOM/86 . . . . . Kirti Dilip Rathod

An improved tape tensioning pulley for ring frame and doublers used in textile and like industries

23rd October, 1986

934/Del/86. Tai-Her Yung. A reciprocating internal combustion engine including a separate gas chamber. (Convention date 23rd October, 1985 and 6th November, 1985) (U.K.).

935/Del/86. Council of Scientific and Industrial Research. Process for the preparation of crystalline phospho-aluminosilicate catalysts.

936/Del/86. Council of Scientific and Industrial Research. A process for production of composite briquettes of chromite fines or concentrate.

937/Del/86. International Mobile Machines Corporation. Subscriber unit for wireless digital telephone system.

938/Del/86. Olaf Fjeldsend A/S. Apparatus for magnetic treatment of flowing liquid.

939/Del/86. Aktiengeselskabet Nordiske Kabel-Og-Traad-fabriker. A process for signal processing of reflected pulses and an apparatus for performing the process.

940/Del/86. International Mobile Machines Corporation. Frequency synthesizer for broadcast telephone system having multiple assignable frequency channels.

941/Del/86. Rodney Stone. Self adjusting device for clamping the contents of a box file or other container. (Convention date 24th October, 1985 and 21st February, 1986) (U.K.).

942/Del/86. I.G.Z. Landis and Gyr Zug AG. Method of and apparatus for converting an electrical signal into a proportional frequency.

24th October, 1986

943/Del/86. Sab Nife AB. Leak and vibration proof valve.

286/BOM/86	Conru Challe & Wai Consultants	An improved automatic process for manufacturing chapattis, roties, parathas, papads, khakras and the like flat rolled wheat products.
		13-10-1986
287/BOM/86	I. V. Tulshiram	Commutatorless direct current devices.
288/BOM/86	S. M. Nikam & H. D. Phadtare	A device to increase the speed of surface transport vehicles by using lever mechanism coupled with connecting rod and crank working on the muscle power provided by the drive co-traveller/s without need of any fuel/external energy.
		15-10-1986
289/BOM/86	Hindustan Lever Ltd 16th Oct, 1985, Gr. Britain	Detergent component and process for making a detergent component.
290/BOM/86	M. S. Patel	An improved tapping attachment.
291/BOM/86	Lubrizol India Ltd.	A process for the production of methacrylic [ester polymers and copolymers for using them and viscosity improvers for lubricating oils
292/BOM/86	Ratnakar Ganesh Patwardhan	Chair.
293/BOM/86	Universal Luggage Mfg. Co. Pvt. Ltd.	An improved suitcase.
294/BOM/86	N. N. Pujari	An improved super rapid jet dyeing machine for use in textile industry.
		16-10-1986
295/BOM/86	D. M. Joshi	Automobile Safety-brake.
		17-10-1986
296/BOM/86	V. I. P. Industries, Limited	A fastening device for pilfer proof fastening of a container such as suitcase to a post, rod, plank or the like and a container such as suitcase having the same.
APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002		
13th October, 1986		
803/Mas/86.	G. M. Rao. Supplementary air pump.	811/Mas/86. BASF Aktiengesellschaft. Protective jacket for a disk-shaped recording medium.
804/Mas/86.	M/s. Gummudipoondi Solar Products Private Ltd. Thermally powered pumping system.	812/Mas/86. Per-olof Karlsson. Loop Pump.
805/Mas/86.	Raychem Corporation. Electrical devices containing conductive polymers.	15th October, 1986
806/Mas/86.	Biocon (U. K.) Limited. Method of producing a sugar syrup from sorghum. (October 12, 1985; United Kingdom).	813/Mas/86. Baltimore Aircoil Company, Inc. Cross flow evaporative coil fluid cooling apparatus.
807/Mas/86.	International Minerals & Chemical Corporation. Process of removing cationic impurities from wet process phosphoric acid.	814/Mas/86. Ownes-Illinois, Inc. Inspection and sorting of molded containers as a function of mold of origin.
808/Mas/86.	Michel Serge Maxime Lefebvre. A diffusion barrier for selective counter diffusion and a method of making such barrier. (February 25, 1982; Australia).	815/Mas/86. Amsted Industries Incorporated. Method and apparatus for positioning and testing railroad wheels.
	14th October, 1986	816/Mas/86. Continental Gummi-Werke Aktiengesellschaft. Belt conveyor system.
809/Mas/86.	Michelin Recherche Et Technique S.A. Pneumatic tire the carcass of which is formed of a regenerated cellulose fiber.	16th October, 1986
810/Mas/86.	Bernard Hooper. An internal combustion engine. (October 19, 1985; United Kingdom).	817/Mas/86. K. Seshadri. An electrical connector.
		818/Mas/86. Mobil Oil Corporation. Lubricant production process.
		819/Mas/86. American Standard Inc. Electronic bipolar interface circuit.
		17th October, 1986
		820/Mas/86. Jayakumar. Stabilised chokes.

821/Mas/86. Merlin Gerin. Operating mechanism for a low voltage electrical circuit breaker.

822/Mas/86. Merlin Gerin. Circuit breaker operating mechanism equipped with a stored energy system.

823/Mas/86. Merlin Gerin. Kinematic transmission system between the operating mechanism and poles of a moulded insulating case electrical circuit breaker.

824/Mas/86. A. Manickam. A float valve device.

20th October, 1986

825/Mas/86. Normalair-Garrett (Holdings) Limited. Fuel Flow Control Valve and Fuel Control System Incorporating same. (November 4th, 1985; United Kingdom).

826/Mas/86. Charbonnages De France (Etablissement Public). Apparatus for supplying unclogging Gas to Fluidised Bed Apparatus.

21st October, 1986

827/Mas/86. Palitex Project-Company GMBH. A Two-For-One Twisting Spindle.

828/Mas/86. Sandvik AB. Pipe Joint.

22nd October, 1986

829/Mas/86. Inland Steel Company. Method for preventing mold explosions during continuous casting of free Machining Steels. (September 5th, 1986. Canada).

830/Mas/86. Altrack Pty. Ltd. Ground Engaging Surface for Endless Tracks, Wheels and Tyres. (November 15th 1985, Australia).

831/Mas/86. Henkel Kommanditgesellschaft Auf Aktien. An Improved Adhesive Stick.

23rd October, 1986

832/Mas/86. Uppinangady Varadaraya Nayak. An Apparatus to Demonstrate A.C. and/or D.C. Dynamos.

24th October, 1986

833/Mas/86. A. H. Robins Company, Incorporated. A process for the preparation of an Aromatic Oxazepine, Thiazepine or Diazepine. (Divisional to Patent Application No. 65/MAS/85).

834/Mas/86. A. H. Robins Company, Incorporated. A process for the preparation of an aromatic or Heterocyclic Oxazepine. (Divisional to Patent Application No. 65/MAS/85).

#### ALTERATION OF DATE

158546. Ante dated to 27th July, 1981.  
(310/Cal/84)

158547. Ante dated to 27th July, 1981.  
(311/Cal/84)

158550. Ante dated to 4th January, 1983.  
(81/Cal/85).

#### COMPLETE SPECIFICATION ACCEPTED

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CLASS : 80 K [VI]. 158521

Int. Cl : B 01 d 43/00.

#### APPARATUS FOR FILTERING A LIQUID-SOLIDS SUSPENSION."

Applicants : ELI IVAN ROBINSKY, OF 66 LYTTON BLVD., TORONTO, ONTARIO M4R 1L3, CANADA, A CANADIAN CITIZEN AND DAVID HARKNESS LAING, OF 16A HENRY STREET, TORONTO, ONTARIO M5T 1X1, CANADA, A CANADIAN CITIZEN.

Inventors : ELI IVAN ROBINSKY & DAVID HARKNESS LAING.

Application for Patent No. 615/DEL/1982 filed on 11th August 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 12 Claims

Filtering apparatus for a liquid-solids suspension comprising tank means having a receiver therein for filter cake and at least one filter means in said tank means spaced above said receiver, characterised by said filter means including a tubular support screen and a filter cloth on the exterior of said support screen, said filter cloth having liquid impermeable narrow bands forming a plurality of separated filtering areas, an accumulator grating disposed on the exterior of said filter cloth, the accumulator grating having a plurality of spaces and gripping surfaces into which filtercake is received, and the space between said support screen and said accumulator grating approximating to the combined thickness of the filter cloth and the anticipated filter cake, supply means connected to the said tank for supplying a liquid-solids suspension to said tank means on one side of said filter means, a filterate compartment on the other side of said filter means for receiving filterate passing through said filter means and flow control means in said supply means for reversing the flow of the liquid-solids suspension through said filter cloth.

(Complete Specification 25 pages Drawings 4 sheets)

CLASS : 195 D [XXIX(3)] 158522

Int. Cl. : B 67d 1/12.

#### "FLUID CONTROL SYSTEMS FOR NOZZLE FLAPPER VALVES".

Applicants : SPERRY CORPORATION, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 1290 AVENUE OF THE AMERICAS, NEW YORK, NEW YORK 10104, UNITED STATES OF AMERICA.

Inventors : JOHANNES NICOLAAS MATTHEUS DE JONG, RICHARD LEROY EARLE & ANTHONY PETER NARDI.

Application for Patent No. 617/DEL/1982 filed on 13th August 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 6 Claims

A fluid control system for nozzle flapper valves comprising a nozzle coupled to a supply of pressurised fluid, rotatable flapper means located so as, in use, to have impinging thereon fluid flow issuing from the nozzle, whereby the flapper means rotates as a result of that fluid flow, means for displacing the rotatable flapper means along its axis of rotation as a function of its angular velocity, and braking means for placing an adjustable load on the rotatable flapper means.

(Complete Specification 8 pages) (Drawing one Sheet)

CLASS : 10 F

158523

Int. Cl. : F 42 b 5/00, 5/16, 5/24, 11/02.

#### "A WEAR REDUCING PROJECTILE WITH FORWARD END AND REARWARD END."

Applicant : THE SECRETARY OF STATE FOR DEFENCE IN HER BRITANNIC MAJESTY'S GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND OF WHITEHALL, LONDON SW1A 2HB, ENGLAND, A BRITISH CORPORATION SOLE.

Inventor : PETER WILLIAM WATERS FULLER.

Application for Patent No. 619/DEL/1982 filed on 13th August, 1982. Convention date 18-8-1981/8125239/(Great Britain).

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 20 Claims

A wear reducing projectile having a forward end and a rearward end, the rearward end being transverse to a fore and aft axis, the projectile being suitable for launching from a barrel by a propellant acting on the rearward end of the projectile and having dispensing means for dispensing a barrel wear reducing additive onto the bore of the barrel during launch, the dispensing means including a chamber within the projectile containing the additive, at least one additive extrusion port extending from the chamber to the exterior of the projectile, and a piston slidably located within the chamber having a forward face adjacent the additive and a rearward face forming at least a portion of the rearward end of the projectile so that during launch the propellant acts on the rearward face of the piston thereby to slide it forward through the chamber to dispense the additive to the bore of the barrel through the extrusion ports.

(Complete Specification 16 pages. Drg. 3 sheets.)

CLASS : 95K

158524

Int. Cl. : B 25b 13/00

#### "WRENCH FOR TIGHTENING NUTS".

Applicant : SKF MEKANPRODUKTER AB., OF BOX 89, S-641 21 KATRINFJOLM, SWEDEN, A SWEDISH COMPANY.

Inventor : STIG PERSSON.

Application for Patent No. 620/DEL/1982 filed on 16th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A wrench for tightening a nut said wrench incorporating a hand grip and a head designed as a part of a ring with a wide opening and a first surface portion on the inner annular surface facing radially inwards and having a shape adapted for non-rotatably connection to the nut, characterized by an arc-shaped second surface portion on the wrench head facing radially inwards and arranged adjacent the first surface portion and adjacent one axial side plane of the wrench head, which arc-shaped surface portion upon engagement against a corresponding outer surface on the nut allows pivoting of the wrench relative to the nut to a position where it due to axial displacement can take up a position where it is non-rotatably connected to the nut, the hand grip being offset axially relative to the head in a direction away from said axial side plane.

(Complete specification 7 pages Drawing one sheet)

CLASS : 42 A-1

158525

Int. Cl. : A 24 c 1/00, 5/00.

#### "A TURNAROUND DEVICE FOR ROD-LIKE ARTICLES, IN PARTICULAR CIGARETTES".

Applicant : G. D. SOCIETA' PET AZIONI, AN ITALIAN COMPANY OF VIA POMPONIA, 10, 40100 BOLOGNA, ITALY.

Inventor : ENDZO SFRAGNOLI.

Application for Patent No. 621/DEL/1982 filed on 16th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 7 Claims

A turnaround device for rod-like articles, in particular cigarettes, comprising a conveyor device operable to advance the said articles in a direction transverse their axes, and a plurality of supports connected to the said conveyor device and aligned along first and second rows which are parallel to one another, the said supports being spaced with a constant and equal pitch along both said rows and each said support being able to house a respective said article, characterised by the fact that each support of the said first row is fixed with respect to the said conveyor device, whilst each support of the said second row is connected to the said second row is connected to the said conveyor device by means of an associated turnaround unit, each turnaround unit comprising, first actuator means operable to impart to the associated said support a reciprocating translational movement in a direction of translation substantially transverse to both a longitudinal axis of the support itself and to the said direction of advance, and second actuator means operable to impart to the associated said support a rotation through 180° starting from an initial position of juxtaposition with a corresponding support of the said first row and about an axis substantially parallel to the direction of the said translation, located at the end of the associated article facing the support of the said first row in the said initial position, and displaced with respect to the longitudinal axis of the associated said support by a distance equal to one quarter of the said pitch or spacing of the said supports.

(Complete specification 15 pages Drawing one sheet)

CLASS : 68 F<sub>1</sub> and 122.

158526

Int. Cl. : H 01f 21/00, G 05f 3/02 and B 03c 3/68.

#### "IMPROVEMENTS IN ELECTROSTATIC PERCIPITATORS."

Applicant : DRESSER INDUSTRIES, INC., A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, ONE OF THE UNITED STATES OF AMERICA, OF THE DRESSER BUILDING, P.O. BOX 718, DALLAS, TEXAS 75221, U.S.A., MANUFACTURERS.

Inventors : THADDEUS MILTON JONES.

Application for Patent No. 625/DEL/1982 filed on 17th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 6 Claims

An electrostatic precipitator incorporating discharge electrodes for charging dust particles in a passing stream and being provided with power supply means for energising said electrodes to a high voltage value, a voltage controller connected to said electrodes to control the input voltage thereto and a voltage divider circuit connected to said voltage controller for supplying a reduced value of voltage to said controller, said voltage divider circuit comprising a high resistance primary resistor for providing a voltage drop to a selected low output voltage, said primary resistor connected to overload protection means such as a differential amplifier operating as an integrator and, on failure of said primary resistor, to restrict increases in output voltage, and diode means connected to said amplifier to prevent excess voltage from being applied to the summing junctions thereof.

(Complete specification 8 pages Drawing one sheet)

CLASS : 180. 158527

Int. Cl. : F 24C 7/00.

#### “A COOKING RANGE USING LIQUIFIED PETROLEUM GAS.”

Applicant : NIKY TASHA (INDIA) PRIVATE LIMITED, AN INDIAN COMPANY OF E-1 and 2, N.D.S.E., Part I, Mahajan House, New Delhi-49.

Inventor : RITU NANDA.

Application for Patent No. 626/DEL/1982 filed on 18th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A cooking range using liquified petroleum gas comprising an oven chamber, a hood located within the oven chamber and above two openings in the oven chamber and two burners of different ratings located below the said openings and directing hot air and products of combustion towards each other through the said openings and an opening in the said hood, the hot air and products of combustion being caused to collide and mix with each other assisted by the directions of their flow and the said hood and to spread uniformly in different directions in the oven chamber, uniform temperature being maintained thereby in the oven chamber.

(Complete specification 5 pages Drawing one sheet).

CLASS : 11C. 158528

Int. Cl. : A231 1/00.

#### “A PROCESS FOR THE PRODUCTION OF MODIFIED SAL SEED METAL BY EXTRACTION OF TANNIN THEREFROM”.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH RAFI MARG, NEW DELHI-1, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventor : VIPPARTY SANJIVA RAO, BINOD BIHARI PARIDA, KODAVANTI MADHUSUDANA RAO AND SHIBA NARAYAN MAHAPATRA.

Application for Patent No. 634/DEL/1982 filed on 20th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 7 Claims

A process for the production of modified sal seed meal by extraction of tannins therefrom comprising the steps of (a) treating deoiled sal seed cake with aqueous caustic soda or soda ash solution, (b) separating the cake from the liquor by filtration or decantation, (c) washing the separated cake with water to free it of the tannin content, (d) drying the washed cake to obtain a free flowing granular meal.

(Complete specification 6 pages).

CLASS : 50 (D+F), 64 B<sub>2</sub> 6A.

158529

Int. Class : F 25 b 31/02, H 01 h 45/02, 45/14, H 02 b 3/08.

#### “HOUSING FOR THE STARTING RELAY AND TERMINALS OF A MOTOR-DRIVEN COMPRESSOR.”

Applicant : NECCHI SOCIETA PER AZIONI, A COMPANY ORGANIZED UNDER LAW OF THE ITALIAN REPUBLIC OF VIA RISMONDO 78, PAVIA, ITALY.

Inventor : ALFRED BAR.

Application for Patent No. 644/DEL/1982 filed on 23rd August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 2 Claims

A housing for the starting relay and terminals of a hermetically enclosed motor-driving compressor which housing comprises a base member connected to the body of said compressor, said base member being provided over one portion thereof with a fixed cover member comprising an upper surface parallel to said base member and connected thereto by means of vertically depending lateral and end walls, said fixed cover portion defining a first chamber having dimensions substantially corresponding to the dimensions of a PTCR relay located within said first compartment, said base member also being provided with a removable cover member adapted to cover the remainder of said base member said removable cover member comprising an upper surface member with downwardly depending peripheral walls adapted to engage the periphery of said remainder of said base member and the upper surface of said fixed cover member, said removable cover member defining a second chamber of dimensions larger than those of said first chamber and corresponding substantially to the dimensions of the terminals of said relay and said compressor which terminals are located therein.

Compl. Specn. 6 pages. Drgs. 2 sheets.

CLASS : 128 E, 128 G, 128 K [XXXVIII(2)].

158530

Int. Class : G 02 b 27/28 & A 61 n 5/00.

#### “AN APPARATUS FOR THE STIMULATION OF BIOLOGICAL PROCESSES RELATED TO CELLULAR ACTIVITY.”

Applicant : MARA FENYO OF 1094 BUDAPEST, TOMPA U. 12, HUNGARY; IVAN KERTESZ, OF 1121 BUDAPEST, KOLTU U. 2-4, HUNGARY; KAROLY ROZSA, OF 1115 BUDAPEST, SZAKASITS A.U. 44B, AND PETER SZEGO, OF 1022 BUDAPEST, HANKOCZY J.U. 27/A, HUNGARY ALL HUNGARIAN CITIZENS.

Inventors : MARTA FENYO, IVAN KERTESZ, KAROLY ROZSA & PETER SZEGO.

Application for Patent No. 647/DEL/1982 filed on 25th August 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1982) Patent Office Branch, New Delhi-110005.

## 20 claims

An apparatus used for the stimulation of biological processes related to cellular activity comprising a light source capable of emitting incoherent light having a continuous or quasi-continuous spectral distribution at least in the 400-700 range of wave-lengths, a deflecting system situated in the part of light emitted by said source to direct beams of said light in a desired direction of treatment and a polarizer situated in said path adapted to produce polarized light beams approaching the locus to be stimulated.

Compl. Specn. 40 pages. Drgs. 11 sheets.

CLASS : 179 A.

158531

Int. Class : B 65b 7/28 & B 67b 5/00.

"CLOSURE DEVICE".

Applicant : SHELL INTERNATIONALE RESEARCH MATSCHAPPIJ B.V. A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLAAN 30. THE HAGUE. NETHERLANDS.

Inventor : JOHN ALFRED VARNDELL.

Application for Patent No. 262/DEL/1982 filed on 30th March, 1982. Convention date on April 7, 1981/81-10878/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1982) Patent Office Branch, New Delhi-110005

## 9 claims

A closure device comprising a base and a lid, the lid being a resiliently deformable disc made of flexible plastics material centrally resiliently mounted on the base and capable of flexing reversibly between and maintaining two stable dished conditions, respectively an externally convex closed form, in which the rim of the disc bears on or surrounds the base, and an externally concave open form, in which the rim of the disc is spaced away from the base and wherein the lid is resiliently mounted on the base by means of a resilient bridge spanning the central area of the base.

Compl. Specn. 11 pages. Drgs. 2 sheets.

CLASS : 40 E [IV(1)]; 164A [II(3)].

158532

Int. Class : C 02 c 1/02, 5/10.

"FLUID BED REACTOR CONTAINING A VOLUME OF WASTE WATER AND HAVING AN INTEGRAL FLOW CIRCULATION".

Applicants : DORR-OLIVER INCORPORATED, OF 77 HAVEMEYER LANE, STAMFORD, CONNECTICUT, UNITED STATES OF AMERICA, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA.

Inventors : RICHARD REA EVANS.

Application for Patent No. 433/DEL/1982 filed on 7th June 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1982) Patent Office Branch, New Delhi-110005.

## 7 claims

A fluid bed reactor containing a volume of waste water and having an integral flow circulator, comprising a reactor tank, a column conduit located substantially in said reactor tank and extending from the bottom to the top of said reactor tank, said column conduit containing a pump for pumping effluent liquids and/or waste water vertically downward through said column conduit, a plurality of fixed, perforated, horizontal collection manifolds in flow connection with and positioned proximate the upper end of said column conduit but sufficiently below the surface of said effluent liquid in said reactor tank such that said liquid may be collected in said manifolds, a plurality of fixed, horizontal distributor headers adjacent the bottom of said reactor tank

in flow connection with the column conduit, distributor pipes connected to said distributor header for distributing said waste water and/or said effluent liquid essentially uniformly across the cross-section of said reactor tank and adjacent the bottom thereof, and an influent pipe, for supplying an external source of waste water, in flow connection with said column conduit at substantially the top of said reactor.

Compl. Specn. 15 pages. Drgs. 3 sheets.

CLASS : 106 & 107G&H.

158533

Int. Class : F02m 39/00.

"DEVICE FOR REGULATING INJECTION OF FUEL INTO AN INTERNAL COMBUSTION ENGINE".

Applicant : PIAGGIO & C. S.p.A., A COMPANY ORGANIZED UNDER LAWS OF THE ITALIAN REPUBLIC OF VIA ANTONIO CECCHI 6, GENOVA, ITALY.

Inventor : CARLO DOVERI.

Application for Patent No. 542/DEL/1982 filed on 16th July, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1982) Patent Office Branch, New Delhi-110005.

## 4 claims

A device for regulating injection of fuel into an internal combustion engine comprising a driven shaft for receiving drive from the engine and a coaxial actuating shaft for co-operation with an injection pump, a linkage of masses subjected to centrifugal forces connecting said driven shaft and said actuating shaft, said linkage of masses being mounted on said driven shaft to vary the position of the driven shaft with respect to the actuating shaft, characterised in that said linkage comprises at least one arm pivoted at one end of said arm to a flange integral with said driven shaft, said arm also having at its opposite end an abutment which is slideable in a complementary seat formed in a counterflange integral with said coaxial actuating shaft, whereby frictional reactive forces are exerted by the abutment in the seat in said counterflange integral with said coaxial actuating shaft as speed of the drive shaft varies, and whereby said arm is pivoted on said plate within an angle of friction relative to a line perpendicular to a surface of said seat, on which said abutment slides.

Compl. Specn. 10 pages Drgs. 2 sheets.

CLASS : 195C & D.

158534

Int. Class : G05d 16/00, 16/08, 16/10 & F16k 31/00.

"A PRESSURE REGULATOR".

Applicant : GOPI KRISHAN KABA, OF E-54 NIRMAL PURI, LAJPAT NAGAR IV, NEW DELHI-110024, INDIA, AN INDIAN NATIONAL.

Inventor : GOPI KRISHAN KABA.

Application for Patent No. 569/DEL/1982 filed on 27th July, 1982.

Complete specification left on 26th October, 1983.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1982) Patent Office Branch, New Delhi-110005.

## 5 claims

A pressure regulator for a liquified petroleum gas cylinder having locking means for locking the regulator to said cylinder comprising an actuating spindle having a first eccentric portion at the distal end for causing an actuation of a valve, said spindle having a recess for supporting an operating lever so that when said operating lever is within the recess the lever is in a lowered vertical position and when the operating lever is supported on the surface opposite to the recess the operating lever is in a raised position, a locking lever or member pivotally secured to the body of said regulator and operat-

ing lever having a movement along a vertical plane, said locking lever having a pivotal movement imparted by said operating lever, said operating lever having a guide surface for guiding the pivotal movement of said locking lever.

Provisional Specification 4 pages.

Compl. Specn. 8 pages.

Drgs. 2 sheets.

CLASS : 76 E & I.

158535

Int. Class : B62j 39/00 & B 62j 7/00.

"A TWO WHEELED MOTOR VEHICLE".

Applicant : PIAGGIO & C. S.p.A. A COMPANY ORGANIZED UNDER LAW OF THE ITALIAN REPUBLIC OF VIA ANTONIO CECCHI, 6 GENOVA, ITALY.

Inventor : CARLO DOVERI.

Application for Patent No. 574/DEL/1982 filed on 27th July, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110005.

8 claims

A two-wheeled motor vehicle wherein the rear part of the vehicle comprises fixed part of the vehicle structure and lateral removable structure secured to said fixed part by means of a device, said device comprising a hook means adapted to swing within a seating of the fixed part between a hook-in position in which the hook means holds the removable structure and an unhooking position by a motion guided by abutment of said hook means against a surface of said seating, said hook means rotatably connected to a crank formed on a shaft supported internally in an inaccessible space of said fixed part, said shaft being swingable by a link means and capable of being actuated from a space of a vehicle which can be closed by key-actuated locking means.

Compl. Specn. 10 pages. Drgs. 4 sheets.

CLASS : 126 C&A and 40 I.

158536

Int. Class : G 01n 25/22, 27/00 and G 08b 17/00.

"A DEVICE FOR DETECTING CONCENTRATION OF COMBUSTIBLE GAS."

Applicant : CHARBONNAGES DE FRANCE, A FRENCH COMPANY OF 9 AVENUE PERCIER, F-75008 PARIS, FRANCE.

Inventors : MAURICE BOUTONNAT AND GERARD ROSE.

Application for Patent No. 808/DEL/82 filed on 4th November, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110005.

6 claims

A device for detecting the concentration of combustible gas in an atmosphere, comprising a detector (4) of the catalytic type in the form of a bridge, an amplifier connected to the detector (4) and to a source of positive direct tension ( $V_+$ ) for amplifying the polarised unbalancing signal(s) supplied by the said detector (4) and a voltage reducing circuit (1) connected on the one hand to the ground via a first switch (2) and on the other hand to the detector (4) via a second switch (3) and supplying two voltages  $V_1$  and  $V_2$  derived from a power supply device (7) characterised in that said device includes a discriminator (6) connected to the amplifier (5) enslaving the first switch (2) to the sign and/or to the maximum amplitude of the signal (S) output by the amplifier (5) and a time base (8) capable of initiating the interrogation sequence acting on the second switch (3).

Compl. Specn. 12 pages. Drg. 1 sheet.

Z-357 C/I/36

CLASS : 26 & 189.

158537

Int. Class : A46b 9/04, 7/00, A61h 13/00.

"COMBINED TOOTHBRUSH AND GUM MASSAGE DEVICE".

Applicant : COLGATE PALMOLIVE COMPANY, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A. OF 300 PARK AVENUE, NEW YORK, NEW YORK 10022, UNITED STATES OF AMERICA.

Inventor : REUBEN MARK.

Application for Patent No. 812/DEL/82 filed on 4th November, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110005.

11 claims

A combined toothbrush and gum massage device which comprises an elongate handle member, a bristle carrying head member pivotally mounted on said handle member near one end thereof for movement between a first operational position in which said head member is in substantially longitudinal alignment with said handle member and a second operational position in which said head member lies substantially at right angles to the longitudinal axis of said handle member and means for releasably locking said head member to said handle member in either of said positions whereby said head member is adapted to resist displacement from either of said position in which it is locked during normal toothbrushing and/or gum massage operations but is readily moved from one position to the other by external application of torque to said head member.

Compl. Specn. 9 pages. Drg. 1 sheet.

CLASS : 42A (1&5).

158538

Int. Class : A24c 5/00 & 5/52.

"CIGARETTE TRANSFER DEVICE".

Applicant : G. D. SOCIETA' PER AZIONI OF VIA POMPONIA, 10, 40100 BOLOGNA, ITALY, AN ITALIAN COMPANY.

Inventor : ENZO SERAGNOLI.

Application for Patent No. 813/DEL/1982 filed on 4th November, 1982.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110005.

5 Claims

A device for transferring cigarette pieces from a twin rod cigarette-making machine to a filter fitting machine characterised in that it comprises at least one head for simultaneously transferring at least one cigarette piece from each of said rods from a take-up position at the end of an outboard bed of the said cigarette-making machine to a release position above the top of an input drum of the said filter fitting machine disposed with its axis of rotation parallel to the said rods, transfer means for causing each of said heads to translate along a path passing through the said two positions and level variation means operable to impart to each of said heads movement in a direction perpendicular to a plane defined by the said rods, the said path being substantially parallel to a direction of advance of the said rods along the said bed at the said take-up position and being substantially perpendicular to the said direction of advance in the said release position.

Compl. Specn. 12 pages. Drgs. 2 sheets.

Class : 40H

158539

Int. Class : B 01 d 53/16.

"A PROCESS FOR THE REMOVAL OF CO<sub>2</sub> FROM A GASEOUS STREAM CONTAINING CO<sub>2</sub>.

Applicant: EXXON RESEARCH AND ENGINEERING COMPANY, a corporation of Delaware, United States of America, carrying on business as a company for the holding of patents and granting licences thereunder, and technical development and research work at Florham Park, New Jersey, United States of America.

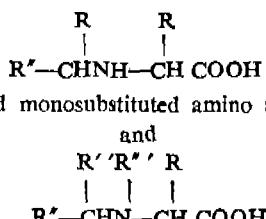
Inventor: GUIDO SARTORI, WARREN ALAN THALER.

Application for Patent No. 814/DEL/1982 filed on 5th November 1982.

Appropriate office for opposition proceeding (Rule 4, Patents Rule 1972) Patent Office Branch, New Delhi-110005.

(8 Claims)

A process for the removal of  $\text{CO}_2$  from a gaseous stream containing  $\text{CO}_2$ , which comprises (1) contacting said gaseous stream in an absorption step with an aqueous absorbing solution comprising (a) a basic alkali metal salt or hydroxide selected from alkali metal bicarbonates, carbonates, hydroxides, borates, phosphates and their mixtures, and (b) an activator or promoter system for said basic alkali metal salt or hydroxide selected from N-secondary butyl glycine and a mixture comprising: (i) at least one sterically hindered monosubstituted amino acid and (ii) at least one tertiary amino acid, said amino acids being defined by the general formulae:



wherein R is either hydrogen or methyl, R' and R'' are each alkyl or substituted alkyl radicals having 1 to 5 carbon atoms, and R'' is a linear alkyl or substituted linear alkyl radical having from 1 to 6 carbon atoms; and (2) in a desorption and regeneration step, desorbing at least a portion of the absorbed  $\text{CO}_2$  from said absorbing solution.

(Complete Specification 25 pages Drawing 2 sheets).

Class: 146E, 31C, 4 8 C 158540.

Int. Class.: HO1 V 1/00, 1/04.

"A MINERAL INSULATED THERMOCOUPLE CABLE HAVING A TERMINATION AT THE HOT JUNCTION END THEREOF AND THE METHOD FOR PROVIDING THE SAME".

Applicant: BICC PUBLIC LIMITED COMPANY, a British company of 21 Bloomsbury Street, London WC1B 3QN, England.

Inventors: WILLIAM MCNEIL & FRANK RENNEY.

Application for patent No. 914/DFL/82 filed on 14th December, 1982.

Convention date 22nd December 1981/8138550/ (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1970) Patent Office Branch, New Delhi-110005.

(10 Claims)

A mineral insulated thermocouple cable having a termination at the hot junction end thereof which comprises a hot junction formed by welding or otherwise electrically connecting together the cable conductors, said hot junction located within the sheath of said cable and spaced from one end of said sheath, a compact of mineral powder located around said hot junction within said sheath, a plug of metal or metal alloy provided within said cable sheath with one end thereof abutting said compact and the other end thereof flush with the end face of said sheath, a collar of metal or metal alloy provided about the end of said cable sheath with one end face of said collar lying in substantially a common plane with the end

face of said cable sheath and a weld or welds being provided between the end face of said cable sheath, said plug and said end face of said collar.

(Complete specification 12 pages) Drawing 1 sheet.

Class: 69-G. 158541.

Int. Cl. H 01 h 13/02.

#### ROTARY SWITCHES.

Applicant: WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventor: 1. GREGORY JAMES GOLUB.

Application No. 624/Cal/83 filed May 19, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

A rotary switch comprising a housing (5) and, disposed therein, a rotatable shaft (7 or 119) and at least one set (9) of contacts, said or each set of contacts comprising a pair of stationary contacts (73, 77) affixed to said housing and disposed therein at opposite sides of the shaft in spaced relationship with respect to each other, and a movable contact structure (85 or 127) coupled with said shaft so as to be rotatable thereby into and from bridging engagement with the stationary contacts, said movable contact structure comprising a pair of substantially parallel spaced elongate bridging contacts (87, 89 or 137, 139) having contact surfaces (91, 93 or 141, 143) disposed thereon adjacent their opposite ends for frictionally receiving the stationary contacts there-between, characterized in that each of said elongate bridging contacts (87, 89 or 137, 139) has associated therewith a magnetizable channel member (95, 97 or 133, 135) which has flange portions and straddles the associated bridging contact in such manner that said flange portions extend toward the corresponding flange portions of the channel member associated with the other bridging contact and, together therewith, define air gaps (e.g. 153) enabling the channel members to be electromagnetically attracted toward each other and thereby apply contact-pressure producing forces to the associated bridging contacts when the contacts are closed and a predetermined current is flowing therethrough.

(Compl. Specn. 15 pages. Drawing 6 sheets).

Class: 93. 158542.

Int. Cl. B 22 f 9/00.

#### DEVICE FOR MANUFACTURING POWDER BY DIVIDING A MELT.

Applicant: LEYBOLD-HERAEUS GMBH, BONNER STRASSE 504, D-5000 KOLN 51, FEDERAL REPUBLIC OF GERMANY.

Inventor: 1. ROLF RUTHARDT.

Application No. 701/Cal/83 filed June 2, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

Device for manufacturing powder by dividing a melt such as of metals or alloy into particles and then cooling the particles until they harden, comprising: means for dividing the melt; a container comprising substantially a vertical shaft with a vertical axis for cooling the particles; powder outtake means communicating with the shaft, characterized in that said powder outtake means comprising a lower section of the shaft and having substantially the same cross-section as the upper section both sections being connected with a releasable connecting element and being separable from each other in a direction perpendicular to the axis of the shaft.

(Compl. Specn. 12 pages. Drawing 1 sheet).

Class : 35-B &amp; 85-Q.

158543.

Int. Cl. C 04 b 7/44.

## APPARATUS FOR BURNING PULVERULENT CEMENT RAW MATERIAL.

Applicant : F. L. SMIDTH &amp; CO. A/S., OF 77, VIGERS-LEV ALLE, DK-2500 VALBY, COPENHAGEN, DENMARK.

Inventor : 1. PETER BECHTOFT NIELSEN.

Application No. 833/Cal/83 filed July 5, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 6 Claims

An apparatus for burning pulverulent raw material such as cement raw materials and raw materials for related industries in which the raw materials are burnt to clinker comprising

a preheater with an inlet and an outlet for heating gas, an inlet for pulverulent raw material, and an outlet for pre-heated pulverulent raw material connected to a material inlet of

a suspension calciner with inlets for fuel, hot air and combustion gas comprising a suspension burning chamber provided with inlets for fuel, hot air and preheated pulverulent raw material and a suspension transfer duct connected to a particle precipitator having an outlet for calciner exhaust gas connected to the heating gas inlet of the preheater and an outlet for calcined material connected to a material inlet of

a kiln with inlets for fuel and hot air, an outlet for kiln exhaust gas connected to the combustion gas inlet of the calciner, and an outlet for burned material connected to a material inlet of

an air cooler for the burned material with an inlet for cooling air, an outlet for cooled material and two outlets for hot air connected to the hot air inlets of the suspension calciner and the kiln, respectively characterized in that

the calciner (4, 8, 28, 9) comprises a kiln gas duct (28) provided with a material inlet opening (12) and connecting the combustion gas inlet (7) of the calciner with a kiln gas suspension inlet (47) in the particle precipitator (9).

the preheater (14-27) is provided with two outlet ducts (22, 22') for two streams of pulverulent raw material.

the first preheater material outlet duct (22) is connected to the material inlet (6) of the suspension burning chamber (4).

the second preheater material outlet duct (22') is connected to the material inlet opening (12) of the kiln gas duct (28), and

the suspension transfer duct (8) is connected to the particle precipitator (9) via an opening arranged between the material inlet opening (12) of the kiln gas duct (28) and the calciner exhaust gas outlet (10) of the particle precipitator (9).

(Compl. Specn. 14 pages.

Drg. 4 sheets).

Class : 108-B1.

158544.

Int. Cl. C 21 b 13/14.

## PROCESS AND INSTALLATION FOR THE DIRECT PRODUCTION OF SPONGE IRON PARTICLES AND LIQUID CRUDE IRON FROM IRON ORE IN LUMP FORM.

Applicants : (1) KORF ENGINEERING GMBH, NEUSERSTRASSE 111, 4000 DUSSELDORF 1, FEDERAL REPUBLIC OF GERMANY; (2) VOEST ALPINE AG, WERKSELANDE, 4010 LINZ, AUSTRIA.

Inventor : 1. BOGDAN VULETIC.

Application No. 1306/Cal/83 filed October 24, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 36 Claims

A process for the direct production of sponge iron particles and liquid crude iron from iron ore in lump form, wherein the iron ore is reduced by means of a hot reducing gas, to sponge iron particles in a direct reduction unit in the form of a loose fill and sponge iron particles which are discharged from the direct reduction unit are fed to a melting gasifier in which the heat required for melting the sponge iron, and reducing gas, are produced from coal which is introduced into the gasifier and oxygen-bearing gas which is blown therewith, at least a part of the reducing gas, after cooling to the temperature prescribed for the reduction operation, being passed into the reduction zone of the direct reduction unit, characterised in that the sponge iron particles which are discharged from the direct reduction unit are separated into a fine grain fraction and a coarse grain fraction and only the fine grain fraction is passed to the melting gasifier.

(Compl. Specn. 31 pages.

Drg. 4 sheets)

Class : 107-C.

158545.

Int. Cl. F 02 b 23/00.

## SPARK-IGNITION AIR-COMPRESSING INTERNAL COMBUSTION ENGINE.

Applicant : M.A.N. MASCRINENFABRIK AUGSBURG-NURNBERG AKTIENGESELLSCHAFT, OF KATZWANGER STR. 101, NURNBERG, WEST GERMANY.

Inventors : 1. FRANZ CHMELA, 2. WALTER HERZOG, 3. RICHARD MEIER.

Application No. 1510/Cal/83 filed December 9, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 9 Claims

Spark-ignition air-compressing internal combustion engine with direct injection of the fuel by a jet applying the major portion of the fuel onto the wall of the combustion chamber provided in the shape of a solid of revolution in the piston where the inflowing air is imparted by means known per se such a rotary motion in the direction of the injected fuel jet that the fuel is gradually removed in the vapour state from the combustion chamber wall and mixed with the air, the injection nozzle being situated in the cylinder head near the edge of the combustion chamber and the ignition device arranged opposite the injection nozzle penetrating into the combustion chamber in the top dead centre position of the piston, characterized in that the side wall (4) of the combustion chamber (3)—seen in cross section—is formed by two curved lines (5, 6) which blend into each other, the first curved line (5) with the smaller radius of curvature ( $R_1$ ) extending from a constricted combustion chamber opening (3a) down to the maximum combustion chamber diameter ( $D_B$ ) and the second curved line (6) with the greater radius of curvature ( $R_2$ ) extending down to and blending into the substantially flat combustion chamber bottom (7), in that the maximum combustion chamber diameter ( $D_B$ ) amounts to 0.5 to 0.7 times the piston diameter ( $D_K$ ) and—measuring from the piston crown (1a)—is located at a depth ( $T_B$ ) which corresponds to 0.3 to 0.4 times the combustion chamber depth ( $T_B$ ) and in that the smaller radius of curvature ( $R_1$ ) of the combustion chamber side wall (4) has a length of 0.2 to 0.3  $T_B$  but the greater radius of curvature ( $R_2$ ) has a length of 0.5 to 0.75  $T_B$  the ratio of the combustion chamber opening diameter ( $d_H$ ) to the maximum combustion chamber diameter ( $T_B$ ) being between 0.85 and 0.95 and the wall height ( $T_H$ ) of the combustion chamber opening (3a) being between 0.1 and 0.15 ( $T_B$ ).

(Compl. Specn. 15 pages.

Drg. 1 sheet.

CLASS : 32-A<sub>1</sub>, 2.

158546

Int. Class : C 09 b 62/00.

PROCESS FOR THE PREPARATION OF WATER-SOLUBLE FIBRE REACTIVE DYESTUFF CONTAINING A B-CHLOROETHYLSULFONYLMETHYL BENZOYL AMINO RADICAL.

Applicant : HOECHST AKTIENGESELLSCHAFT OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. LUDWIG SCHLAFER, 2. REINHARD HAHNLE.

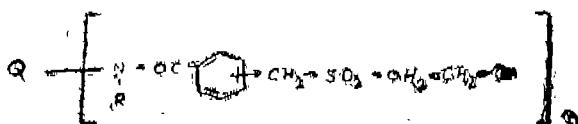
Application No. 310/Cal/84 filed May 9, 1984.

Division of Application No. 841/Cal/81 dated 27th July, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

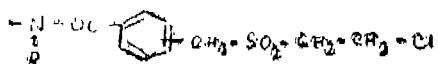
10 Claims

A process for the preparation of a water-soluble dyestuff of the general formula (1) of the accompanying drawings



Formula 1

in which Q is the radical of an organic water-soluble dyestuff such as herein described containing one or more water-solubilizing groups, R is a hydrogen atom or an alkyl group of 1 to 4 carbon atoms and n is the number 1 or 2 which comprises reacting a conventional organic starting compound of that organic dyestuff molecule Q, suitable for its synthesis, with another conventional organic starting compound of that organic dyestuff molecule Q, in the customary manner with the proviso that these starting compounds being chosen such that at least one of them contains one or more water-solubilizing groups and at least one group of the general formula (4).



Formula 4

in which R has the meaning given above and these starting compounds again being chosen such that a compound of the formula (1) in which n represents the number 1 or 2 is obtained.

Compl. Specn. 109 pages. Drgs. 10 sheets.

CLASS : 32-A<sub>1</sub>, 2 + 144-E<sub>6</sub>.

158547

Int. Class : C 09 b 45/00, 62/00.

PROCESS FOR THE PREPARATION OF WATER-SOLUBLE, HEAVY-METAL COMPLEX DYESTUFFS.

Applicant : HOECHST AKTIENGESELLSCHAFT OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. LUDWIG SCHLAFER, 2. REINHARD HAHNLE.

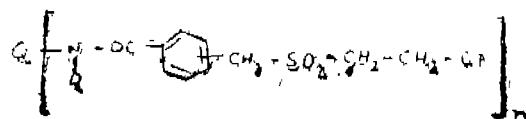
Application No. 311/Cal/84 filed May 9, 1984.

Division of Application No. 841/Cal/81 dated 27th July, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

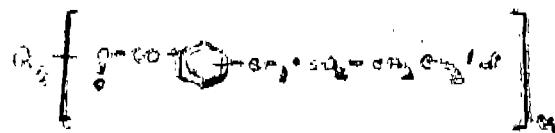
25 Claims

A process for the preparation of water-soluble heavymetal complex dyestuffs of the general formula (1) of the accompanying drawings



Formula 1

in which Q is the radical of a water-soluble organic heavy-metal complex mono, distriazolo or tetrakisazo dyestuff molecule and which contains water-solubilizing groups such as carboxylic acid groups and sulfonic acid groups, R is a hydrogen atom or an alkyl group of 1 to 4 C-atoms and n represents the number 1 or 2 which comprises reacting a compound of the general formula (2)



Formula 2

in which Q<sub>s</sub> is the radical of a water-soluble organic metal-free mono dis-tri- or tetrakisazo dyestuff molecule, structurally corresponding to Q, and R and n are defined as above, with a heavy-metal yielding agent, such as, for example, an agent yielding a copper, nickel, cobalt or chromium ion, by conventional complex-forming conditions.

Compl. Specn. 80 pages. Drgs. 10 sheets.

CLASS : 32-C.

158548

Int. Class : C 12 d 13/00.

PROCESS FOR THE PREPARATION OF 'PENICILLINAMIDASE' DIALDEHYDE ADDUCT.

Applicant : AMERICAN HOME PRODUCTS CORPORATION, OF 685 THIRD AVENUE, NEW YORK, NEW YORK 10017, UNITED STATES OF AMERICA.

Inventor : 1. PHILIP JUDSON CROSS.

Application No. 590/Cal/84 filed August 27, 1984.

Convention dated 24th September, 1983 (83 25607) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

A process for the preparation of a water-insoluble, self-immobilized penicillinamidase-dialdehyde adduct which comprises adding an aliphatic dialdehyde containing 5 to 7 carbon atoms to a solution of penicillinamidase produced by *Bacillus megaterium* at a pH of between 6 to 9.5 at a temperature of from 0 to 45°C, optionally adding a multivalent anion after the addition of the dialdehyde to the penicillinamidase.

Compl. Specn. 19 pages. Drg. Nil.

CLASS : 32-C.

158549

Int. Class : C 12 b 1/00, 3/00.

PROCESS FOR THE PREPARATION OF FERMENTATION BROTH FOR COENZYME B<sub>12</sub> AND OTHER-CORRINOID PRODUCTION.

Applicant : RICHTER GEDEON VEGYESZETI GYAR R. T. OF 19-21, GYOMROI UT, BUDAPEST X, HUNGARY.

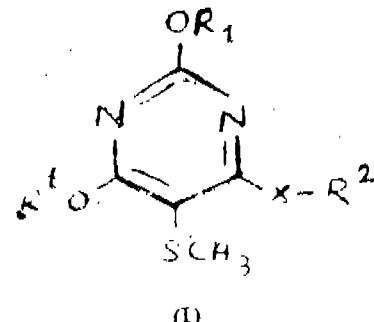
Inventors : 1. LASZLO SZEMLER, 2. DR. EVA CSERÉY PECHÁNY, 3. MARIA LANGER, 4. GYULA DRUBY, 5. VALERIA SIKE.

Application No. 597/Cal/84 filed August 28, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

A process for preparing a 5-methylthiopyrimidine derivative represented by the general formula (I) of the accompanying drawings.



Process for the preparation of a fermentation broth containing coenzyme B<sub>12</sub>, with a new, anaerobic, mesophilic, methane-producing mixed micropopulation, under anaerobic, septic conditions, using a new broth containing methanol, precursors and partially known nutrients, which process comprises :

- removing 5 to 15 volume per cent of the inoculum fermentation broth containing the anaerobic, mesophilic, methane-producing new mixed micropopulation and replacing same with an equal volume of a broth containing cornsteep liquor hydrolysate and/or corn slops of hydrolysate thereof and other known nutrients, the number and concentration of which has been reduced, for 6 to 8 days, and if desired, further manufacturing the fermentation broth removed,
- after reaching an assimilation velocity of at least 0.15 to 0.2 g methanol/lit. fermentation broth/hour, continuing removal of the fermentation broth as described in step (a) but replacing same with a broth supplemented with ammonium sulfate and oxylidine, and continuing fermentation for 6 to 8 days, and if desired, further manufacturing the fermentation broth removed,
- after achieving an assimilation velocity of 0.2 to 0.3 g methanol/lit fermentation broth/hour—i.e. after converting the inoculum fermentation broth into a maintaining fermentation broth—continuing removal of the fermentation broth and addition of fresh broth as described in step (b), and if desired, interrupting the removal fermentation broth for several days, and
- adding of the removed maintaining fermentation broth on the first day nutrients according to step (b), and if desired on the second day only methanol, cornsteep liquor or cornsteep liquor hydrolysate and ammonium carbonate and further manufacturing the fermentation broth obtained, which is suitable for batchwise production, and
- repeating steps (a), (c) and (d) daily.

Compl. Specn. 30 pages. Drg. Nil.

CLASS : 32-F<sub>1</sub> (b); 60-X<sub>1</sub>.

158550

Int. Class : C 07 d 51/36.

A PROCESS FOR PREPARING 5-METHYLTHIOPYRIMIDINE DERIVATIVES.

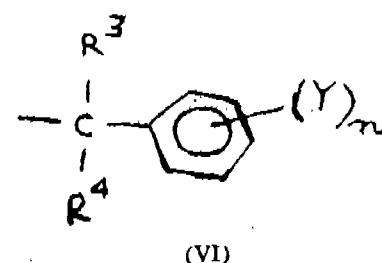
Applicant : MITSUI TOATSU CHEMICALS, INCORPORATED, NO. 2-5 KASUMIGASEKI 3-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventors : 1. KATSUTOSHI ISHIKAWA, 2. HITOSHI SHIMOTORI, 3. NOBORU IIDA, 4. KAZUO AKIHIRO, 5. SHUJI OZAWA.

Application No. 81/Cal/85 filed February 6, 1985.

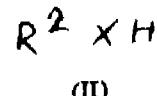
Division of Application No. 14/Cal/83 dated 4th January, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

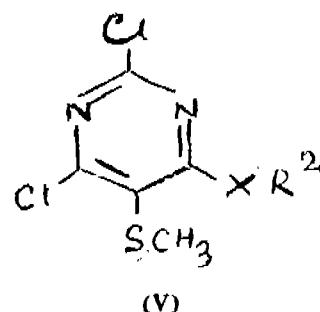


in which R<sup>4</sup> and R<sup>4</sup> are individually a hydrogen atom or a methyl group, Y means a hydrogen or halogen atom or a methyl or methoxy group, and n stands for an integer of 1 or 2, and X denotes an oxygen or sulfur atom, which process comprises the following consecutive steps :

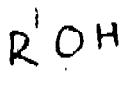
reacting, in the presence of a base, 5-methylthio-2, 4, 6-trichloropyrimidine with an equivalent of a compound represented by the general formula (II) of the accompanying drawings



where R<sup>2</sup> and X have the same significance as defined above in the general formula (I) so as to form a mono-substituted derivative represented by the general formula (V) of the accompanying drawings



wherein R<sup>1</sup> and X have the same significance as defined above in the general formula (I); and reacting, in the presence of a base, the mono-substituted derivative with a compound represented by the general formula (IV) of the accompanying drawings



(IV)

wherein R<sup>1</sup> has the same significance as defined above in the general formula (I).

Compl. Specn. 18 pages. Drgs. 7 sheets.

CLASS : 133A.

158551.

Int. Class : H02P 7/36.

"A CONTROL SYSTEM IN COMBINATION WITH INDUCTION MOTOR FOR CONTROLLING THE TORQUE OF THE INDUCTION MOTOR."

Applicant : THE GENERAL ELECTRIC COMPANY P.L.C., a British company, of 1 Stanhope Gate, London W1A 1EH, England.

Inventors : COLIN DAVID SCHAUER AND ROY CADDY.

Application for Patent No. 592/DEL/1982 filed on 2nd August, 1982.

Convention Date on 12th August, 1981/8124625 and 1st March, 1982/8205942/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

6 Claims.

A control system in combination with induction motor for controlling the torque of the induction motor through the stator windings only in dependence upon a desired torque or speed indication, said control system being characterized by :

- (a) first control means responsive to said torque or speed indication for generating first and second demand signals representative of the desired amplitude of said current and of the desired accrued angle of slip, of m.m.f. relative to the rotor of said motor;
- (b) second control means coupled to said first control means for resolving said first demand signal into orthogonal demand components proportional to the sine and cosine respectively of said desired accrued angle of slip;
- (c) third control means for generating a rotor angle signal representative of the angular position of the rotor of the induction motor relative to the stator, said third control means being connected between said first control means and a means for determining the rotor velocity, said means for determining the rotor velocity being in turn connected to the first control means;
- (d) forward transform means responsive to said rotor angle signal and to said orthogonal demand components to produce equivalent phase winding drive signals, and
- (e) means coupled to said forward transform means for feeding said alternating current to stator phase-windings of the induction motor in dependence upon said phase winding drive signals.

(Compl. Specn. 16 pages. Drg. 5 sheets.

CLASS : 204 and 143D2 [XL(5)]

158552.

Int. Class : B65b 1/30

"APPARATUS FOR DISPENSING PREDETERMINED WEIGHTS OF MATERIAL INTO CONTAINERS".

Applicants : DESIGN ENGINEERING PTY. LIMITED, a Company incorporated under the laws of the State of New South Wales, of Factory No. 2, 228 Headland Road, Dee Why, New South Wales, 2099, Australia.

Inventors : WILLIAM GEORGE BAKER.

Application for Patent No. 646/DEL/1982 filed on 24th August 1982.

Convention application filed on 31-8-1981 No. (87441/82) (AUSTRALIA).

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

7 Claims.

Apparatus for dispensing predetermined weight of material into containers, said apparatus comprising :

a pair of pivotable support members, one end of each support member providing a support for a respective container to be filled, the other end of each support member providing a predetermined counterweight to determine the weight of material to be dispensed into said respective container, each said support member being pivotable about a horizontal transverse axis between its end;

a material feeding chute for dispensing material alternately into each said container said chute being connected to a directing member pivotable about a horizontal axis and located above said support members; and

means for directing said feeding chute from one container to the other when said one container is filled to the predetermined weight;

characterized in that said means for directing said feeding chute comprises two substantially inextensible flexible lines such as herein described, each connected between the container end of a respective one of said support members and a respective end of said directing member, whereby each said flexible line causes said directing member to pivot about a pivoting axis in response to movement of the corresponding support member in only one direction when the respective container is filled to thereby direct said feeding chute to the other container.

Compl. Specn. 11 pages. Drg. 3 sheets.

CLASS : 99F [XL(4)], 129Q [XXXV]

158553

Int. Class : F16j, 11/00; B65d, 13/00.

"APPARATUS FOR MANUFACTURING CAN-LIKE CONTAINER HAVING AN INNER END CLOSURE AND A CONTAINER MANUFACTURED BY SAID APPARATUS".

Applicant(s) : ESSLTE PAC ATKIEBOLAG, a Swedish joint stock corporation residing at Veddestavagen 7-9, S-175 62 Jarfalla, Sweden.

Inventor OD WIKAR CHRISTENSSON.

Application for Patent No. 661/DEL/1982 filed on 31st August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

8 Claims.

Apparatus for manufacturing a can-like container comprising a sleeve formed container jacket and a cup formed end closure for at least one end of the jacket, in which at least one of container jacket and the end closure being made of a composite material having a base of cardboard or a similar stiff material which material does not absorb high frequency current energy and a further layer, located on the base and fabricated of a material which can absorb high frequency current energy, and in which at least one of the common surfaces of the jacket

and the end closure of the container to be manufactured comprises a weldable layer of a material which can be welded by high frequency current energy, and in which the apparatus comprises means for carrying and supporting at least a part of the jacket adjacent an open end thereof and a press piston for pressing an end closure part into said open end of the container jacket, characterized in that that the apparatus comprises

means for forming a planar punched blank of an end closure material into the cup formed end closure having a bottom of a size which is equal to or slightly less than the internal cross section of the jacket, and an upwardly projecting end closure rim extending from said bottom around the end closure, and which means includes a formation ring through which the planar punched blank of end closure is pressed by the press piston and which formation ring defines a central opening which is equal to or slightly less than internal dimensions of the jacket;

means for moving the press piston down and up, respectively, in relation to the jacket carrier;

and means for transmitting high frequency current energy to the portion of said layer which can absorb high frequency current energy which is positioned adjacent to the common surface between the jacket and the end closure rim to provide welding together of the end closure and the jacket while said end closure is maintained in a fixed position in relation to said jacket;

and in which the press piston includes an expandable means extending around the press piston which, in the non-expanded condition thereof, lies at or within the outer surface of the press piston, and which, in the expanded condition thereof, projects beyond the surface of the press piston, and in which the said expandable means comprises an expandable ring having a surface of convex curved shape in cross section and of a high such that the end closure rim is contacted by the expandable ring in the expanded condition thereof, at position intermediate the extremities of the common surface between the closure rim and the jacket;

and means for providing expansion of the expandable ring of said expandable means over an area whose width is less than the height of the common surface between the end closure rim and the jacket so as to contact the end closure rim at said position intermediate the extremities of the common surface.

Compl. Specn. 19 pages. Drg. 3 sheets.

CLASS : 6B & 122.

158554

Int. Class : B03c 3/00, 3/40.

"IMPROVEMENTS IN OR RELATING TO ELECTROSTATIC PRECIPITATOR".

Applicant : BHARAT HEAVY ELECTRICALS LTD., 18-20 Kasturba Gandhi Marg, New Delhi-110001, India, an Indian Company.

Inventor : DURAISAMY RAJU RAMAKRISHNAN.

Application for patent No. 757/Del/82 filed on 16th October, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(3 Claims)

An improved electrostatic precipitator comprising a pair of parallel collecting plates 1 and an array of emitting electrodes 2 located in a plane midway between the collecting plates characterized in that the emitting electrodes are in the form of metallic rings 4 welded to central rods which are welded at their upper and lower ends to a frame.

(Complete specification 6 pages Drawing two sheets)

CLASS : 37A.

158555

Int. Class : E 05f 5/00.

"IMPROVEMENT IN OR RELATING TO DOOR STOPPER."

Applicant : MANGAT RAM AND HANS RAJ both of residential address 7/102, Subhash Nagar, New Delhi, Indian National who are partners of ROXY METAL INDUSTRIES, W. Z. 18, Basal Dara Pur, New Delhi-110005.

Inventor : MANGAT RAM AND HANS RAJ.

Application for Patent No. 789 Del/82 filed on 30th October, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(4 Claims)

An improved door stopper comprising a metallic main plate having two dome shaped notches at the centre in the vertical position of the main plate; a hugging arms shaped rod loaded with a solid rubber cube at its opening and being placed at said dome shaped notches; a metal strip bound by pivots provided over the hugging arms shaped rod; a base cover plate provided with two extruded rules at centre thereof opposite to each other to prevent the movements of said hugging arms shaped rod to sideways, both the main plate and the base cover plate being provided with four holes at corners in alignment with each other.

(Complete Specification 6 pages. Drawing one sheet)

CLASS : 98 I.

158556

Int. Class : F24j 3/00, 3/02.

"AN IMPROVEMED SOLAR ENERGY COOKER".

Applicant : KRISHAN DAYAL MANNAN, Professor of Mechanical Engineering Department of Mechanical Engineering, Punjab Agricultural University, Ludhiana-141 004 (India).

Inventor : KRISHAN DAYAL MANNAN.

Application for Patent No. 790/Del/1982 filed on 30th October 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

3 Claims

An improved Solar Energy Cooker comprising a hot box and a multi step asymmetric reflector assembly: the said hot box consisting of an inner shallow rectangular tray with blackened interior on which cooking vessels are placed and outer tray with at least five cm thick insulation in between the sides and the bottom and having the top side covered with a lid in which two glass sheets atleast two cm apart are fixed; and the said multi-step asymmetric reflector assembly which is hinged to the top of the backside of the said hot box, the said multi-step asymmetric reflector assembly being formed by fixing on a supporting frame two or more equal or unequal plane reflectors one at the top of the other at progressively steeper angles and provision of adjustable stays to keep the said multi-step asymmetric reflector assembly fixed in any angular position so that solar rays directly and after reflection from each reflector pass through the double glass cover of the said hot box to be absorbed by the blackened surface of the cooking vessels and inner tray to perform cooking.

(Compl. Specn. 6 pages.

Drg. 1 sheet.

CLASS : 32F3 (a), 39 C.

158557

Int. Class : C07 c 31/04, 35/00.

"REACTOR FOR USE IN A CATALYTIC REACTION".

Applicant(s) : IMPERIAL CHEMICAL INDUSTRIES PLC, a British company of Imperial House, Millbank, London SW 1P 3JF, England.

Inventor : ALWYN PINTO

Application for Patent No. 803/Del/1982 filed on 3rd November, 1982.

Convention date 19-11-1981/8134920/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## (5 Claims)

A reactor for use in a catalytic reaction wherein a reactant gas is passed through a bed of particulate catalyst comprising a vertically oriented bed for said particulate catalyst, a plurality of vertically oriented heat exchanged tubes within the bed and means to supply reactant gas to the bottom of such tubes and to feed it from such tubes downwardly through the bed, characterised in that the tubes are supported by a set of headers from which the tubes project upwardly through the bed, whereby to provide catalyst-fillable space between the headers and between the tubes over substantially their whole length.

(Complete Specification 15 Pages Drawings two sheets)

CLASS : 107E&amp;G.

158558

Int. Class : F01n 3/00, 3/08 &amp; 3/10.

"A DEVICE FOR REMOVAL OF HAZARDOUS POLLUTANTS".

Applicant : IQBAL KRISHNA BHARATI, an Indian National of N 552, Sector 9, R. K. Puram, New Delhi, India.

Inventor : IQBAL KRISHNA BHARATI.

Application for Patent No. 829/Del/1982 filed on 10th November, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## (4 Claims)

A device for removal of hazardous pollutants present in the exhaust stream of an internal combustion engine and adapted to be connected to the exhaust pipe of said engine, said device comprising a chamber having an inlet for introduction of the exhaust stream, characterized in that at least a first and a second pipe is disposed within said chamber and extends outwardly in opposite directions from said chamber, said first pipe extending partly within said second pipe and in a spaced relationship so as to form a low pressure zone, said first pipe being an air inlet pipe for supplying atmospheric air to said low pressure zone, said second pipe being a discharge pipe.

(Complete specification 7 pages Drawings one sheet)

CLASS : 53C.

158559

Int. Class : B62m 3/00.

"A TWO WHEELER MOTOR VEHICLES PROVIDED WITH A FOOT REST".

Applicant THE ATLAS CYCLE INDUSTRIES LIMITED, a Public Limited Company incorporated under the Indian Companies Act, 1913 and having its registered office at Atlas Nagar, Atlas Road, SONEPAT State of Haryana, India and Vikram Kapur S/o Shri Bishamber Das Kapur, residing at 3, Aurangzeb Lane, New Delhi, India, Indian National.

Inventor : VIKRAM KAPUR.

Application for Patent No. 838/Del/1982 filed on 12th November, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## (2 Claims)

A two wheeler motor vehicle provided with a foot rest on either side of the rear wheel of the vehicle, each foot rest being secured to the lower end of the stationary upper part of a rear shock absorber of the vehicle characterised in that the foot rest is secured by a clamp which is secured by a bolt and nut to a hub integral with the lower end of a bracket which bracket is secured at its upper end to the lower end of the upper part of the said rear shock absorber (Complete specification 6 pages Drawing one sheet)

CLASS : 68 E 1[LVII(3)]

158560

Int. Class : H 01 h—73/00.

"SENSING DEVICE RESPONSIVE TO A PRIMARY ALTERNATING CURRENT FLOWING IN AN ELECTRICAL CONDUCTOR".

Applicant(s) : BRUSH SWITCHGEAR LIMITED, of P.O. Box 19, Loughborough, Leicestershire LE11 1HL, England, a British company.

Inventor(s) : COLIN GRIFFITHS &amp; DAVID RICHARD AUBREY.

Application for Patent No. 845/Del/1982 filed on 16th November 1982. Convention application No. 8137825 filed on 15th December 1981 (Great Britain).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## (5 Claims)

A sensing device responsive to a primary alternating current flowing in an electrical conductor, comprising at least one saturable current transformer which produces at an output thereof an alternating secondary current whose magnitude is dependent upon the magnitude of the primary current, a current-sensitive switch connected in parallel across the output of the transformer, and a single actuator connected in parallel across the output of the or each transformer, the current-sensitive switch being a thermal switching device which opens in a time dependent on the magnitude of the secondary current when said secondary current is above a threshold value corresponding to a first predetermined value of the primary current, the transformer saturating to a degree dependent upon the secondary current when the current-sensitive switch is operated at a primary current above said first predetermined value, the actuator having an electrical resistance which is at least five times greater than that of the current-sensitive switch so that when the primary current is above said first predetermined value but below a second predetermined value, the secondary current is insufficient to operate the actuator unless the current-sensitive switch first opens, and so that when the primary current is above said second predetermined value, the secondary current is sufficient to operate the actuator directly (Complete specification 13 pages) (Drawings one sheet)

## PATENTS SEALED

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## AMENDMENT PROCEEDINGS UNDER SECTION 57

(1)

Notice is hereby given that Automotive Products Limited, a British Company of Tachbrook Road, Leamington Spa, Warwickshire CV 31 3ER, England has made an application under Section 57 of the Patents Act, 1970 for amendment of Application, specification and drawings of their application for Patent No. 565/Del/80 for "An Internal Brake Shoe Drum Assembly for Automobiles". The amendment is by way of correcting the name of the applicants company from "Automotive Products Limited" to "Automotive Products PLC" in application form, specification and drawings. The application for amendments and proposed amendments can be inspected free of charge at the Patent Office Branch, M. M. Building, Saraswati Marg, Karol Bagh, New Delhi-110 005, or copies of the same can be had on payment of usual copying charges.

Any person interested in opposing the application for amendment may file a notice of opposition on form 30 within 3 months from the date of this notification at Patent Office Branch, New Delhi. If the written statement of opposition is not filed with the notice of opposition, it should be filed within one month from the date of filing of said notice of opposition.

(2)

Notice is hereby given that Automotive Products Limited, a British Company of Tachbrook Road, Leamington Spa, Warwickshire CV 31 3ER, England, has made an application under Section 57 of the Patents Act, 1970, for amendment of Application, specification and drawings of their application for Patent No. 382/Del/80 for "A FLUID ASSISTED BOOSTER". The amendment is by way of correcting the name of the applicants company from "Automotive Products Limited" to "Automotive Products PLC" in application form, specification and drawings. The application for amendments and proposed amendments can be inspected free of charge at the Patent Office Branch, M. M. Building, Saraswati Marg, Karol Bagh, New Delhi-110 005, or copies of the same can be had on payment of usual copying charges.

Any person interested in opposing the application for amendment may file a notice of opposition on form 30 within 3 months from the date of this notification at Patent Office Branch, New Delhi. If the written statement of opposition is not filed with the notice of opposition, it should be filed within one month from the date of filing of said notice of opposition.

(3)

Notice is hereby given that the Chief Controller Research & Development, Ministry of Defence, Govt. of India, New Delhi, India, an Indian National has made an application under section 57 of the Patents Act 1970, for amendment of specification of application for Patent No. 777/Del/80 (154765) for "Process for the manufacture of tungsten based heavy alloy". The amendment is by way of 'to define the invention more clearly'. The application for amendments and proposed amendments can be inspected free of charge at the Patent Office Branch, M. M. Building, Saraswati Marg, Karol Bagh, New Delhi-110 005, or copies of the same can be had on payment of usual copying charges.

Any person interested in opposing the application for amendment may file a notice of opposition on form 30 within 3 months from the date of this notification at Patent Office Branch, New Delhi. If the written statement of opposition is not filed with the notice of opposition, it should be filed within one month from the date of filing of said notice of opposition.

## RENEWAL FEES PAID

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 155085 155096 155167 155280 155404 155405 155539 155541  
 155739 155789 155791 155816 155874 156134 156143 156145  
 156187 156239 156245 156277 156281 156286 156287 156289  
 156292 156297 156303 156321 156350 156352.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 156999. Ion Exchange (India) Limited Tiecicon House, Dr. E. Moses Road, Bombay-400 011, Maharashtra, India, an Indian Company. "Water Purifier". 29th April, 1986.

Class 1. No. 157052. Duralium Corporation (India) a registered Partnership firm of G-89 Sarvodayanagar, 1st Panjarpole Lane, Bombay 400 004, State of Maharashtra, India. "Ice Pail". 12th May, 1986.

Class 1. No. 157055. Mcphersons Limited, a Company incorporated under the laws of the State of Victoria, Australia, of 525 Collins Street, Melbourne, Victoria, Australia, "a Knife". Reciprocity date 11th November, 1985 (Australia).

Class 1. No. 157107. Meera Metal Industries (a registered Partnership firm) at 32/2 Panjarpol Lane, C.F. Tank Road, Bombay-400 004, Maharashtra State, India. "Pan". 3rd June, 1986.

Class 1. No. 157162. Application Art Laboratories Co., Ltd, a limited liability Company, organised and existing under the laws of Japan of 9-16, Hanahata 2 chome, Adachiku, Tokyo, Japan. "Fastener for Clothings". 18th June, 1986.

Class 3. No. 157106. Eagle Flask Private Limited, an Indian Company, at Eagle Estate, Talegaon-410 507, District Pune, State of Maharashtra, India. "Vacuum Flask". 3rd June, 1986.

Class 3. Nos. 157133, 157135. Eagle Flask Private Limited, an Indian Company, at Eagle Estate, Talegaon-410 507, District Pune, Maharashtra State, India. "Flask". 11th June, 1986.

Class 3. No. 157157. Eagle Flask Private Limited, an Indian Company under the Companies Act, at Eagle Estate Talegaon-410 507, District Pune, State of Maharashtra, India. "Vacuum Jug". 17th June, 1986.

Class 3. No. 157196. Oriental Metal Industries 4932-Bara Tooti, Sadar Bazar, Delhi-110006. "Toy Helicopter". 25th June, 1986.

Class 3. No. 157194. Dipika Metal & Allied Industries, a registered Partnership firm having its address at B-37/38, New Empire Industrial Estate, Kandivita Lane, J.B. Nagar, Andheri East, Bombay-400 059, State of Maharashtra, India. "Pencil Sharpner". 24th June, 1986.

Class 3. No. 156998. Ion Exchange (India) Limited, Ticicon House, Dr. E. Moses Road, Bombay-400 001, Maharashtra, India, an Indian Company. "Water Purifier". 29th April, 1986.

Class 3. Nos. 156988, 156989. Maheshwari Proteins Limited, an Indian Company of E-1/109, Arera Colony, Bhopal 462 016 (India). "Containers". 24th April, 1986.

Class 3. No. 157022. Masters B. R. Plastics, 314, A to Z, Industrial Estate, 3rd Floor, Fergusson Road, Bombay 400 013, (A registered Partnership concern) Maharashtra. "Comb". 6th May, 1986.

Class 5. No. 157110. Lion Pencils Private Limited, a company incorporated under the Provisions of Indian Companies Act, at Andrew Nagar, S.V.

Road, Dahisar, Bombay-400 068, State of Maharashtra, India. "Carton". 3rd June, 1986.

Class 5. No. 157111. Lion Pencils Private Limited, a company incorporated under the Provisions of Indian Companies Act, at Andrew Nagar, S.V. Road, Dahisar, Bombay-400 068, State of Maharashtra, India. "Pencil". 3rd June, 1986.

*Extn. of Copyright for the Third Period of five years.*

Nos. 156181, 156184, 156185, 156190, 156191, 156192, 156186, 156187, 155838, 156188, 156189, 156193. .... Class 1.

Nos. 156111, 156307, 156444. .... Class 3.

Nos. 156199, 156154, 156155, 156403, 155663. .... Class 5.

No. 156195. .... Class 12.

R. A. ACHARYA  
Controller General of Patents, Designs  
and Trade Marks.